

Name _____

Static Electricity & Lightning

Pre-session: Activity Sheet Two

All of us have seen lightning during a thunderstorm but do you realize that you have experienced what causes lightning in your own home and at school. Try the mini experiments below and see what you discover causes lightning in nature.

Activity One:

Balloon Decorating: Blow up the balloon in your workstation and figure out a way to get it to stick to the wall without tape, glue, string, or staples. Come on use your head to solve this problem!

What did you do?

Activity Two:

Shock 'Em: While rubbing your feet on the carpet see if you can shock a member of your team (not the teacher). If this does not work remember the last time you played this game of tag at home. Record what caused this shocking experience to take place.

It's easy...

Activity Three:

Magic Ruler: Okay magician, in your workstation, take out the piece of cloth and plastic ruler. Rub the cloth over the ruler for 60 seconds and then hold it quickly over a small pile of torn pieces of paper. What happen? Explain why you think this happen.

It's easy...

Activity Four:

Sweater Lightning: With your group try to remember the last time late at night in the middle of winter you took off a heavy sweater or sweatshirt. Do you remember seeing lightning in the room? What made this happen? Explain why you think this happen.

It's easy...

Bring It All Together:

Okay now that you have completed the activities above what prediction can you make as to how lightning in clouds happens? Try to describe what you think happens be sure to use the following terms: friction, static, positive and negative molecules, and electricity.

Draw it: With your teacher or by yourself draw a picture of lightning.